

AMENDMENTS TO THE CLAIMS

1. (Original) A method, comprising:

determining an area of weakness in a ball grid array (BGA) package having an

array of solder balls; and

applying a bonder to the area of weakness in the BGA package, wherein the

bonder is applied independently of the array of solder balls.
2. (Original) The method of claim 1, wherein the BGA package comprises:

an integrated circuit (IC) device;

a first surface coupled with the IC device;

a printed circuit board (PCB) having a second surface, the second surface aligned

with the first surface using the array of solder balls, wherein the array of

solder balls placed in between the first surface and the second surface; and

solder joints to attach the array of solder balls with the first surface and the second

surface.
3. (Original) The method of claim 1, wherein the applying of the bonder comprises

applying the bonder between the first surface and the second surface to provide

resistance to the BGA package against warpage.
4. (Original) The method of claim 3, wherein the warpage comprises at least one

of the following: opening, cracking, curving, bending, and breaking of the second

surface.
5. (Original) The method of claim 1, wherein the area of weakness comprises at

least one of the following: edges, corners, and perimeter of the BGA package.

6. (Original) The method of claim 1, wherein the applying of the bonder comprises applying the bonder using a bonder dispenser.
7. (Original) The method of claim 1, wherein the bonder comprises at least one of the following: a thermoplastic bonder and a silicon bonder.
8. (Original) The method of claim 1, wherein the applying of the bonder comprises applying the thermoplastic bonder using a hot melting jig or a dispenser, the hot melting jig and the dispenser comprise at least one of the following: a Asymtek Dispenser System, a hot melt hand applicator, an ITW Dynamelt, and an adhesive unit.
9. (Original) The method of claim 1, wherein the applying of the bonder comprises applying the silicon bonder using an epoxy dispenser machine.
10. (Original) The method of claim 1, wherein the independent application of the bonder is performed using software to control placement distance of the bonder with respect to the array of solder balls.
11. (Original) A method, comprising:

determining an area of weakness in a ball grid array (BGA) package; and

applying a thermoplastic bonder to the area of weakness between a first surface

and a second surface in the BGA package.
12. (Original) The method of claim 11, further comprising:

printing solder paste to create a BGA package;

placing surface mount technology (SMT) on the BGA package using the solder

paste;

solder reflowing;

solder waving; and
processing backend.

13. (Original) The method of claim 11, wherein the applying comprises applying the thermoplastic bonder after solder waving.
14. (Original) The method of claim 11, wherein the thermoplastic bonder is applied using a hot melting jig or a dispenser, the hot melting jig and the dispenser comprise at least one of the following: a Asymtek Dispenser System, a hot melt hand applicator, an ITW Dynamelt, and an adhesive unit.
15. (Original) A method, comprising:

determining an area of weakness in a ball grid array (BGA) package; and

applying a silicon bonder to the area of weakness between a first surface and a

second surface in the BGA package.
16. (Original) The method of claim 15, further comprising:

printing solder paste to create a BGA package;

placing surface mount technology (SMT) on the BGA package using the solder
paste;

solder reflowing;

solder waving; and

processing backend.
17. (Original) The method of claim 15, wherein the applying comprises applying the silicon bonder prior to solder reflowing.
18. (Original) The method of claim 15, wherein the silicon bonder is applied using an epoxy dispenser machine with silicon volume.

Claims 19-29 (Cancelled)